Applicant: John Kihn

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For: Momentum Investment System, Process and Product

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Document A

Marked Up Copy of Claims as Amended

WHAT IS CLAIMED IS:

Claim 1 (currently amended): A financial system comprising:

- (a) means for selecting, from the a universe of first asset classes, a first portfolio containing a restricted number of said first asset classes that have demonstrated superior returns by maintaining momentum during a an existing first period of time of relatively long duration;
- (b) means for selecting, from said first portfolio, these asset classes, a second portfolio portfolios of selected assets that have demonstrated superior returns by maintaining momentum during an existing a second period of time of relatively short duration;
- (c) means for establishing and optimizing a benchmark based upon these said first assets portfolio and said second portfolios of assets portfolio to identify a moving portfolio having a calculated momentum index, and
- (d) means for tracking and periodically updating investment decisions to monitor and maintain said momentum index the calculated momentum of the said moving portfolio.

Claim 2 (currently amended): The financial system of claim 1 wherein said first designated period of time is at least two years and said second designated period of time is at most two years.

Claim 3 (currently amended): A financial process comprising the steps of:

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- (a) selecting, from the a universe of asset classes, a first portfolio containing a restricted number of asset classes that have demonstrated superior returns by maintaining momentum during an existing a first period of time of relatively long duration;
- (b) selecting, from these asset classes said first portfolio, a second portfolio portfolios of assets that have demonstrated superior returns by maintaining momentum during an existing a second period of time of relatively short duration;
- (c) establishing and optimizing a benchmark based upon these portfolios of assets said first portfolio and said second portfolio to identify a moving portfolio having a calculated momentum benchmark, and
- (d) tracking and periodically updating investment decisions to monitor and maintain the said calculated momentum <u>benchmark</u> of the <u>said</u> moving portfolio.

Claim 4 (currently amended): The financial process of claim 3 wherein said first designated period of time is at least two years and said second designated period of time is at most two years.

Claim 5 (currently amended): A financial system comprising:

- (a) means for selecting, from the a universe of asset classes, a first portfolio containing a restricted number of asset classes that have demonstrated superior asset flows by maintaining momentum during an existing first period of time of relatively long duration;
 - (b) means for selecting, from these asset classes, portfolios of said

first portfolio, a second portfolio of selected assets that have demonstrated superior returns by maintaining momentum during an existing second period of time of relatively short duration;

- (c) means for establishing and optimizing a benchmark based upon these portfolios of assets said first portfolio and said secong portfolio to identify a moving portfolio having a calculated momentum benchmark, and
- (d) means for tracking and periodically updating investment decisions to monitor and maintain the calculated momentum of the moving portfolio benchmark;
- (e) said second mentioned means for selecting operating in accordance with the following regression:

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RMF_{t}^{i} - RTB_{t} = \alpha^{i} + \beta^{i}(RAC_{t} - RTB_{t}) + e_{t}^{i}
, where
RMF.
= return for portfolio or mutual fund i at time t (i.e., month t),
RTB.
= return for specified asset at time t,
\alpha^{i}
= alpha of mutual fund i,
= beta (i.e., slope coefficient) for mutual fund i,
= return for mutual fund asset class at time t, and
= error term for mutual fund i at time t. Therefore, the estimated equation is of the form:
\hat{\alpha}^i = (RMF^i - RTB) - [\hat{\beta}^i (RAC - RTB)]
, where alpha and beta are estimates.
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Claim 6 (currently amended): The financial system of claim 5 wherein said first designated period of time is at least two years and said second designated period of time is at most two years.

Claim 7 (currently amended): A financial process comprising the steps of:

- (a) <u>first</u>, selecting, from the <u>a</u> universe of asset classes, a <u>first group</u> <u>containing a</u> restricted number of asset classes that have demonstrated superior returns and/or asset flows by maintaining momentum during an existing first period of time of relatively long duration;
- (b) second, selecting, from-these asset classes said first set, a second set portfolios of assets that have demonstrated superior returns by maintaining momentum during an existing second period of time of relatively short duration;
- (c) third, establishing and optimizing a benchmark based upon these portfolios of assets said first set and said second set to identify a moving portfolio having a calculated momentum benchmark, and
- (d) <u>fourth</u>, tracking and periodically updating investment decisions to monitor and maintain the <u>said</u> calculated momentum <u>benchmark</u> of the moving portfolio.
- (e) said second mentioned step of selecting being performed in accordance with the following regression:

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RMF_{i}^{i} - RTB_{i} = \alpha^{i} + \beta^{i}(RAC_{i} - RTB_{i}) + e_{i}^{i}
, where
RMF,
= return for mutual fund i at time t (i.e., month t),
= return for Treasury Bill at time t,
= alpha of mutual fund i,
B
= beta (i.e., slope coefficient) for mutual fund i,
RAC.
= return for mutual fund asset class at time t, and
= error term for mutual fund i at time t.
the estimated equation being of the form:
\hat{\alpha}^{i} = (RMF^{i} - RTB) - [\hat{\beta}^{i}(RAC - RTB)]
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, where alpha and beta are estimates.

Claim 8 (currently amended): The financial process of claim 7 wherein said first designated period of time is at least two years and said second designated period of time is at most two years.

Claim 9 (currently amended): A financial system comprising:

- (a) means for selecting, from the a universe of asset classes, a restricted number of asset classes that have demonstrated superior returns and/or asset flows by maintaining momentum during an existing first period of time of relatively long duration;
 - (b) means for selecting, from these asset classes, portfolios of assets

that have demonstrated superior returns by maintaining momentum during an existing second period of time of relatively short duration;

- (c) means for establishing and optimizing a benchmark based upon these portfolios of assets to identify a'moving portfolio having calculated momentum, and
- (d) means for tracking and periodically updating investment decisions to monitor and maintain the calculated momentum of the moving portfolio.
- (e) said second mentioned means for selecting operating in accordance with the following regression:

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RMF_{i}^{i} - RTB_{i} = \alpha^{i} + \beta^{i}(RAC_{i} - RTB_{i}) + e_{i}^{i}
, where
RMF.
= return for mutual fund i at time t (i.e., month t),
= return for specified asset at time t,
= alpha of mutual fund i,
= beta (i.e., slope coefficient) for mutual fund i,
RAC,
= return for mutual fund asset class at time t, and
e!
= error term for mutual fund i at time t, the estimated equation being in the form:
\hat{\alpha}^{i} = (RMF^{i} - RTB) - [\hat{\beta}^{i}(RAC - RTB)]
, where alpha and beta are estimates.
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Claim 10 (currently amended): The financial system of claim 9 wherein said first designated period of time is at least two years and said second designated period of time is at most two years.

Claim 11 (currently amended): A financial process comprising the steps of:

- (a) selecting, from the a universe of asset classes, a restricted number of asset classes that have demonstrated superior returns and/or asset flows by maintaining momentum during an existing first period of time of relatively long duration;
- (b) selecting, from these asset classes, portfolios of assets that have demonstrated superior returns by maintaining momentum during an existing second period oftime of relatively short duration;
- (c) establishing and optimizing a benchmark based upon these portfolios of assets to identify a moving portfolio having calculated momentum, and
- (d) tracking and periodically updating investment decisions to monitor and maintain the calculated momentum of the moving portfolio.
- (e) said second mentioned selecting operating in accordance with the following regression:

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RMF_{t}^{i} - RTB_{t} = \alpha^{i} + \beta^{i}(RAC_{t} - RTB_{t}) + e_{t}^{i}
. where
RMF,
= return for mutual fund i at time t (i.e., month t),
RTB,
= return for specified asset at time t,
= alpha of mutual fund i,
= beta (i.e., slope coefficient) for mutual fund i,
= return for mutual fund asset class at time t, and
= error term for mutual fund i at time t, the estimated equation being in the form:
\hat{\alpha}^{t} = (RMF^{t} - RTB) - [\hat{\beta}^{t}(RAC - RTB)]
, where alpha and beta are estimates.
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Claim 12 (currently amended): The financial process of claim 11 wherein said first designated period of time is at least two years and said second designated period of time is at most two years.

Claim 13: (cancelled) Claim 14: (cancelled)

Claim 15: (cancelled)